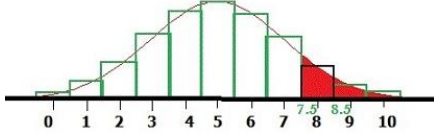


Distribution Approximations

Approximation	Conditions
<p>Normal distribution as approximation to the binomial If $X \sim B(n, p)$ and if n is large and/or p is close to $\frac{1}{2}$, then $X \sim N(np, npq)$ approximately. Include continuity correction</p> 	$np > 5$ $nq > 5$ $p \approx \frac{1}{2}$
<p>Poisson distribution as approximation to the binomial If $X \sim B(n, p)$ and if n is large and p is small, then $X \sim Po(np)$ approximately.</p>	$n > 50$ $np < 5$
<p>Normal distribution as approximation to the Poisson If $X \sim Po(\lambda)$ and if λ is large, then $X \sim N(\lambda, \lambda)$ approximately. Include continuity correction</p>	$\lambda > 15$